SOLVING

AIR FILM TECHNOLOGY

Modular Air Bearing System

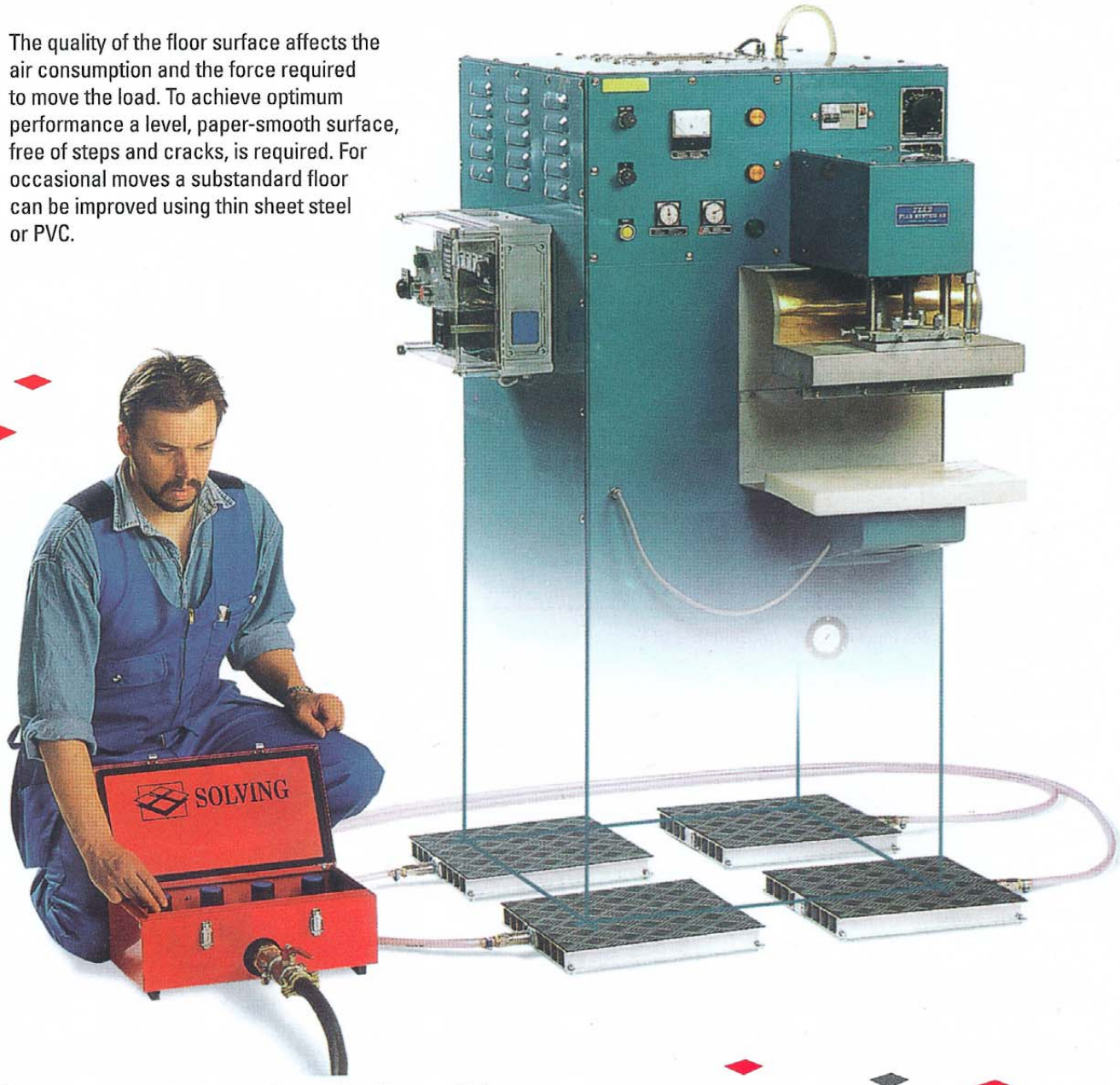
Operation

Solving modular air bearing systems are designed to transport various types of heavy loads and items of machinery.

To ensure maximum stability, at least three or four air bearing modules should be placed under the load, as far apart from each other as possible, and in such a way as to divide the weight of the load evenly between them.

The air bearing modules should then be connected to the control unit and the compressed air system. The air pressure regulators are used to increase the air pressure until the modules lift the load off the floor, and a thin film of air is formed under them. The load "floats" on the film of air, virtually friction-free making it easy to move and position.

The quality of the floor surface affects the air consumption and the force required to move the load. To achieve optimum performance a level, paper-smooth surface, free of steps and cracks, is required. For occasional moves a substandard floor can be improved using thin sheet steel or PVC.



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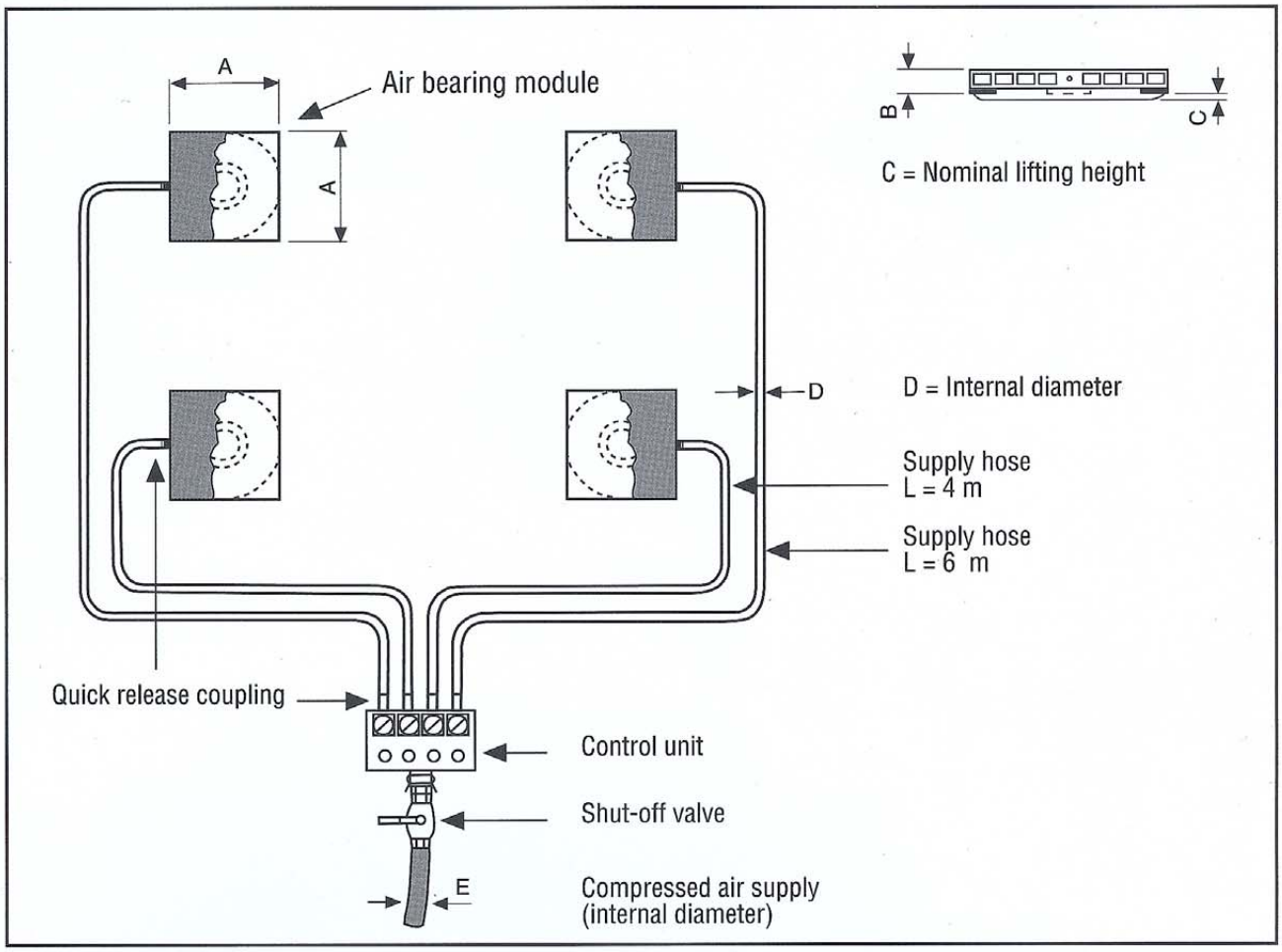

TECHNICAL DATA

Type	Capacity kg/lbs 1)	Air consumption Nl/min/SCFM 2)	Module type	Air pressure kPa/psi 3)	A mm	B mm	C mm	D in	E in 5)	Control unit type
MLS412	7000 15400	1120 39	ML 12	300 43	304	31/51[4]	15	1/2	1	MRB 4-15
MLS415	10000 22000	2200 77	ML 15	300 43	380	31/51[4]	20	1/2	1	MRB 4-15
MLS421S	14000 31000	3000 106	ML 21S	210 30	534	58	25	3/4	1	MRB 4-20
MLS427S	24000 53000	3400 120	ML 27S	210 30	684	65	35	3/4	1 1/2	MRB 4-20
MLS436S	44000 97000	4000 141	ML 36S	210 30	914	71	50	3/4	1 1/2	MRB 4-20
MLS421H	28000 62000	5200 184	ML 21H	410 59	534	58	25	3/4	1 1/2	MRB 4-20
MLS427H	48000 106000	6000 212	ML 27H	430 62	684	65	35	3/4	1 1/2	MRB 4-20
MLS436H	80000 176000	7000 247	ML 36H	400 58	914	71	50	1	1 1/2	MRB 4-25
MLS442H	120000 265000	7500 262	ML 42H	400 58	1070	71	65	1	2	MRB 4-25
MLS448H	160000 353000	8000 282	ML 48H	450 65	1220	71	75	1	2	MRB 4-25

1) The modules must be placed under the load so as to keep within the capacity of the air bearing element. Please see separate brochure on air bearing elements.
2) These figures refer to good floor conditions, e.g. power-trowelled concrete surfaces.
3) Air pressure in air bearing element at max load (100 kPa = 1 bar)
4) Cast aluminium load module / Aluminium extruded load module
5) These figures also refer to the connection thread of the shut-off valve.

The Modular Air Bearing System includes:

- 4 air bearing modules
- 4 supply hoses with quick release couplings
- Control unit equipped with pressure regulator and gauge for each module and supply pressure gauge
- 30 m supply hose including shut-off valve
- Operating instructions

Optional:

- Remote control unit
- Control unit for six-module system
- Alternative hose lengths
- Outlets for air jacks

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